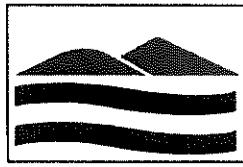


EXHIBIT 1



Land-Tech

LANDFILL TECHNOLOGIES OF ARECIBO, LLC

29 de mayo de 2018

Lcda. Nilda del Mar Sánchez
Gerente
Área de Control de Contaminación de Terrenos
Junta de Calidad Ambiental
Apartado 11488
San Juan, PR 00910

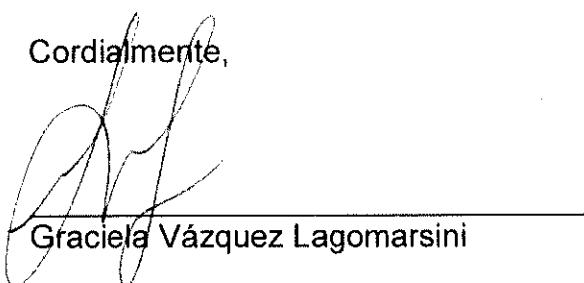
**RE: RESULTADOS DE MONITORIA
AGUA SUBTERRÁNEA
ABRIL 2018
SISTEMA DE RELLENO SANITARIO DE ARECIBO**

Estimada Lcda. Sánchez:

Landfill Technologies of Arecibo, LLC, en virtud de la Regla 551 del Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos, presenta para su evaluación el Informe de Resultados de Monitoreo de Agua Subterránea del Sistema de Relleno Sanitario de Arecibo para el periodo de abril de 2018.

De requerir información adicional no dude en comunicarse con quien suscribe a su conveniencia al 787-273-7639 ó permisos@landfillpr.com.

Cordialmente,



Graciela Vázquez Lagomarsini

 COPY

Landfill Technologies Corp.

Resultados de Programa de Monitoreo de Aguas Subterráneas - Abril de 2018

Sistema de Relleno Sanitario de Arecibo

PR-682, Km.10.6, Arecibo, PR

703396

Reporte de Resultados de Monitoreo de Aguas Subterráneas

Abril de 2018

10 de abril de 2018

Versión 1.0





Resultados de Programa de Monitoreo de Aguas Subterráneas - Abril de 2018

Sistema de Relleno Sanitario de Arecibo
PR-682, Km. 10.6, Arecibo, PR

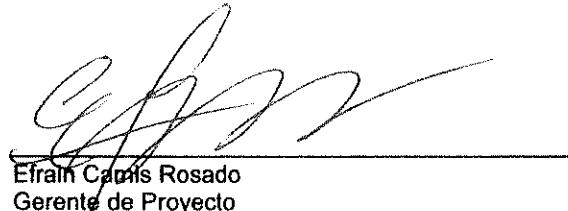
Preparado para:
Landfill Technologies Corp.
P.O. Box 1322
Gurabo, PR 00778

Preparado por:
Groundwater & Environmental Services of PR, LLC.
1550 Ave. Ponce De León, Pda. 23, Piso 2
Santurce, PR 00909-1725

TEL: 787-721-1418
www.gesonline.com

GES Proyecto:
7101421

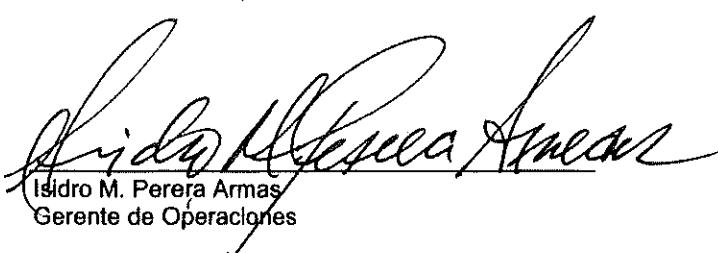
Fecha:
10 de abril de 2018



Efraim Camis Rosado
Gerente de Proyecto



Luz E. Martínez Mercado
Control de Calidad y Certeza



Idílio M. Perera Armas
Gerente de Operaciones

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Apéndices

Apéndice A – Copia de Formularios de Campo

Apéndice B – Cadenas de Custodia

Apéndice C – Informe de Resultados de Laboratorio Certificados

Acrónimos y Abreviaciones

CH ₄	metano
CO	monóxido de carbono
COVs	compuestos orgánicos volátiles
GESPR	Groundwater & Environmental Services of PR, LLC
H ₂ S	sulfuro de hidrógeno
JCA	Junta de Calidad Ambiental
LIE	límite inferior de explosividad
LTC	Landfill Technologies Corp.
MCL	Límite máximo de contaminación permisible (Maximum Contamination Level)
O ₂	oxígeno
PID	detector de orgánicos volátiles con lámpara de fotoionización
SRS	Sistema de Relleno Sanitario
USEPA	Agencia Federal de Protección Ambiental (United States Environmental Protection Agency)
USGS	Servicio Geológico Federal (United States Geological Survey)

1 Introducción

Este informe contiene los resultados del monitoreo y análisis de aguas subterráneas realizado el día 3 de abril de 2018 en el sistema de relleno sanitario (SRS) del Municipio de Arecibo, Puerto Rico. La **Figura 1** presenta la ubicación del SRS en el cuadrángulo del Servicio Geológico Federal (USGS, por sus siglas en inglés) correspondiente al área de Arecibo.

Las actividades de monitoreo y análisis fueron realizados conforme a los procedimientos establecidos en el Plan de Monitoreo de Agua Subterránea ("el Plan") aprobado por la Junta de Calidad Ambiental (JCA) y Landfill Technologies Corp. (LTC) en el año 2001. En este Plan se establecen los requisitos de monitoreo de las aguas subterráneas para la presencia de 45 compuestos orgánicos volátiles (COVs) y 15 metales típicamente asociados a la operación del SRS, los cuales se encuentran en el Apéndice II (*Lista de Constituyentes Peligrosos Inorgánicos y Orgánicos*) del Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos.

El propósito del programa de monitoreo es confirmar la ausencia o presencia de dichos constituyentes peligrosos en el agua subterránea como resultado de la posible migración de éstos desde el SRS hacia el agua subterránea.

Las concentraciones de los constituyentes peligrosos no deberán exceder los límites máximos de contaminación permisible establecidos por la Agencia de Protección Ambiental (USEPA) (MCL, por sus siglas en inglés). De lo contrario, se requerirá la notificación escrita del hallazgo y la evaluación de medidas correctivas en cumplimiento con la Regla 559 del Reglamento para el Manejo de los Desperdicios Sólidos No Peligrosos.

2 Alcance de los Trabajos

Las actividades de monitoreo incluyeron la obtención de muestras de agua subterránea del pozo W-5 ubicado gradiente arriba en la entrada del SRS y de los pozos de cumplimiento W-1, W-2, W-3 y W-4. El pozo W-2 no fue monitoreado debido a que el área donde se encuentra este pozo estaba inundada. La **Figura 2** muestra la ubicación de los pozos.

Previo al purgado y toma de muestras se midió el nivel de agua dentro de cada pozo utilizando una sonda electrónica de interfaz. El purgado y muestreo de los pozos se realizó aplicando el método de muestreo de bajo flujo, utilizando una bomba peristáltica para extraer el agua subterránea a través del revestimiento de la formación, aproximadamente a la misma razón de flujo que sale de la formación, y sin perturbar la columna de agua estancada por encima del punto de muestreo.

Durante este proceso de purgado se obtuvo lecturas de conductividad específica, pH, turbidez, temperatura, salinidad y sólidos disueltos totales. Copias de los formularios de muestreo de agua se encuentra en el **Apéndice A**.

Para propósitos de control de calidad se obtuvo blancos de equipo, de campo y de viaje (EB, FB y TB, por sus siglas en inglés).

También se obtuvo muestras duplicadas de todas las muestras de agua, las cuales fueron identificadas de igual manera que las muestras de agua pero con la letra D al final del nombre. Por ejemplo, la muestra duplicada de W-1 se identificó como W-1-D. Las muestras de agua y sus duplicados fueron analizadas para determinar el contenido de compuestos orgánicos volátiles utilizando el Método 8260, y para metales utilizando el Método 6010 de EPA.

El control de las muestras desde su obtención hasta su entrega al laboratorio fue documentado con cadenas de custodia. Copia del formulario de cadena de custodia utilizado durante el muestreo está incluida en el **Apéndice B**.

3 Resultados

A continuación, se presentan los datos de campo y resultados analíticos obtenidos.

3.1 Nivel de Agua Subterránea

Los niveles de agua medidos en los pozos variaron entre 3.56 pies en el pozo W-5 y 29.92 pies en el pozo W-1 (**Apéndice A**).

3.2 Compuestos Orgánicos Volátiles

Las muestras de agua obtenidas del pozo W-1 resultaron con concentraciones detectables de etilbenceno, estireno y tolueno; mientras que las muestras de agua obtenidas de los pozos W-3, W-4 y W-5 resultaron con concentraciones detectables de acetona. No obstante, las concentraciones detectadas no sobrepasaron los MCLs, según establecidos por la USEPA. Las muestras de control de calidad resultaron con concentraciones no detectables o por debajo de los MCLs para los parámetros analizados.

La **Tabla 1** presenta los resultados analíticos de las muestras para los compuestos orgánicos volátiles. El **Apéndice C** presenta una copia del informe de resultados certificados por el laboratorio Pace Analytical.

3.3 Metales

Las muestras de agua resultaron con concentraciones detectables de arsénico, cromo, cobre, plomo, vanadio y zinc. De todas las muestras analizadas, solo la muestra W-1-D (0.019 mg/L) resultó con una concentración de plomo por encima del MCL de 0.015 mg/L. La **Tabla 2** presenta los resultados analíticos de las muestras de agua.

El **Apéndice C** presenta una copia del informe de resultados certificados por el laboratorio Pace Analytical.

4 Recomendaciones

A base de las observaciones de campo y los resultados obtenidos, GESPR recomienda continuar con el programa de monitoreo de agua subterránea.

Atentamente,

Groundwater & Environmental Services of PR, LLC.



Isidro M. Perera Armas, BS, MBA
Site Operations Manager

Tablas

Sistema de Relleno Sanitario
Arecibo, Puerto Rico

NOMBRE	CAS NO.	PARAMETRO DE ANÁLISIS					MUESTRAS DE AGUA DE POZOS					POZOS DE CUMPLIMIENTO				
		MUESTRAS DAOC					GRADIENTE ARRIBA					Pozo W.1				
		MCL	TB	FB	W.1	W.1-D	W.2	W.2-D	W.3	W.3-D	W.4	W.4-D	W.5	W.5-D	Pozo W.4	Pozo W.5
Acetona	67-64-1	4.000	0.026	ND	NA	ND	NA	NA	ND	0.014	0.028	ND	ND	ND	ND	0.010
Benceno	71-43-2	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Bromodiclorometano	75-27-4	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Bromoformo	75-25-2	0.700	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Bromometano	74-83-9	0.050	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
2-Buandiona (MEK)	78-83-3	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.010
Disulfuro de Carbono	75-15-0	4.000	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Tetradecano de Carbono	56-23-5	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Clorobenceno	108-90-7	0.700	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Cloroformo	67-66-3	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Clorometano	74-87-3	0.200	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-Dibromo-3-Chloropropano	96-12-8	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Dibromodiclorometano	124-48-1	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-Dibromuro de etileno (EDB)	106-83-4	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Diclorodifluorometano	75-71-8	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,1-Dicloroetano	75-94-3	0.007	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-Dicloroetano	107-06-2	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,1-Dicloroetano	75-95-4	0.007	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
CIS-1,3-Dicloropropeno	156-59-2	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
TRANS-1,2-Dicloroetano	156-60-5	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,2-Dicloropropeno	78-87-5	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
CIS-1,3-Dicloropropeno	100-61-5	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
TRANS-1,3-Dicloropropeno	100-61-6	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Etilbenzeno	100-41-4	0.7	ND	ND	NA	0.012	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
2-Hexanona	59-17-6	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.010
Isopropilbenceno (Cumeno)	98-82-8	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Acetato de Metilo	79-20-9	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.010
Cloruro de Metileno	75-09-2	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
4-Methyl-2-Pentanona (MBK)	108-10-1	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Methyl-Terti-Butil Eter	1634-04-4	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.010
Estireno	100-42-5	0.100	ND	ND	NA	0.048	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,2,2-Tetraclorometano	79-34-5	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Tetracloroetano	127-18-4	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Tolueno	108-88-3	1.000	ND	ND	NA	0.024	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,1-Tricloroetano	71-55-6	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
1,1,2-Tricloroetano	79-00-5	0.005	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Tricloroetano	79-01-6	0.002	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Triclorofluorometano	75-69-4	***	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005
Cloretro de Vinilo	75-01-4	0.002	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.002
M4-P-Xileno	10	ND	ND	NA	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.010
O-Xileno	95-47-6	10	ND	ND	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	0.005

LEYENDA

COVs: Compuestos Orgánicos Volátiles según método requerido para este muestra.
 CAS NO.: Identificación numérica para análisis (Chemical Abstract Services, en inglés).
 Método 8240: Método de análisis para volátiles según USEPA SW-846

MCL: Límite máximo de contaminación permisible establecido por USEPA.
 mg/l: miligramos por litro
 ND: No detectado
 NA: No aplicable o no analizado

DAOC: Muestras de Control y Control de Calidad
 RL: Límite de Reporte (Reporting Limit) en mg/L
 ***: USEPA no tiene un MCL establecido para este parámetro

Todos los resultados corresponden a concentración que excede el MCL.

***: USEPA no tiene un MCL establecido para este parámetro.

ND: No detectado

RESUMEN DE RESULTADOS ANALÍTICOS DE METALES MÉTODOS 6010
Tareas 2010-2011

**Sistema de Relleno Sanitario
Arecibo, Puerto Rico**

PARÁMETRO DE ANÁLISIS	MUESTRAS QA/QC										GRADIENTE ARRIBA										POZOS DE CUMPLIMIENTO										MUESTRAS DE AGUA DE POZOS									
	Pozo W-1					Pozo W-2					Pozo W-3					Pozo W-4					Pozo W-5					W-4-D					W-5-D					RL (mg/L)				
	CAS NO.	MCL	TB	FB	EB	W-1	W-1-D	W-2	W-2-D	W-3	W-3-D	W-4	W-4-D	W-5	W-5-D	W-4	W-5	W-4-D	W-5-D	W-4	W-5	W-4-D	W-5-D	W-4	W-5	W-4-D	W-5-D	W-4	W-5	W-4-D	W-5-D	W-4	W-5	W-4-D	W-5-D					
Antimonio	7440-36-0	0.060	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.060								
Arsénico	7440-38-2	0.050	NA	NA	NA	ND	0.035	NA	NA	NA	ND	ND	0.011	0.014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010									
Bario	7440-39-3	2.000	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.200								
Berilio	7440-41-7	0.004	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005								
Cadmio	7440-43-9	0.005	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005								
Cromo	7440-47-3	0.100	NA	NA	NA	0.016	0.089	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010									
Cobalto	7440-48-4	***	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010								
Cobre	7440-50-8	1.300	NA	NA	NA	0.14	0.26	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010									
Pb	7439-92-1	0.015	NA	NA	NA	0.0077	0.019	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005									
Níquel	7440-02-0	***	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.040								
Selenio	7782-49-2	0.050	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035								
Plata	7440-22-4	***	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010								
Talio	7440-28-0	0.002	NA	NA	NA	ND	ND	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.010								
Vanadio	7440-62-2	***	NA	NA	NA	ND	0.071	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.050									
Zinc	7440-66-6	5.000	NA	NA	NA	0.12	0.23	NA	NA	NA	ND	ND	0.13	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.020									

LEYENDA

COVs: Compuestos Orgánicos Volátiles

CAS NO.: Identificador numérico para parámetro analizado (Chemical Abstract Services, en inglés)

Método 6010: Método de Análisis para metales según USEPA SW-846

MCL: Límite máximo de contaminación permisible establecido por USEPA.

mg/L: miligramos por litro

NA: No aplicable o no analizado.

ND: No detectado.

QA/QC: Muestras de Control y Certezza de Calidad

RL: Límite de Reporte (Reporting Limit) en mg/L

***: USEPA no tiene un MCL establecido para este parámetro

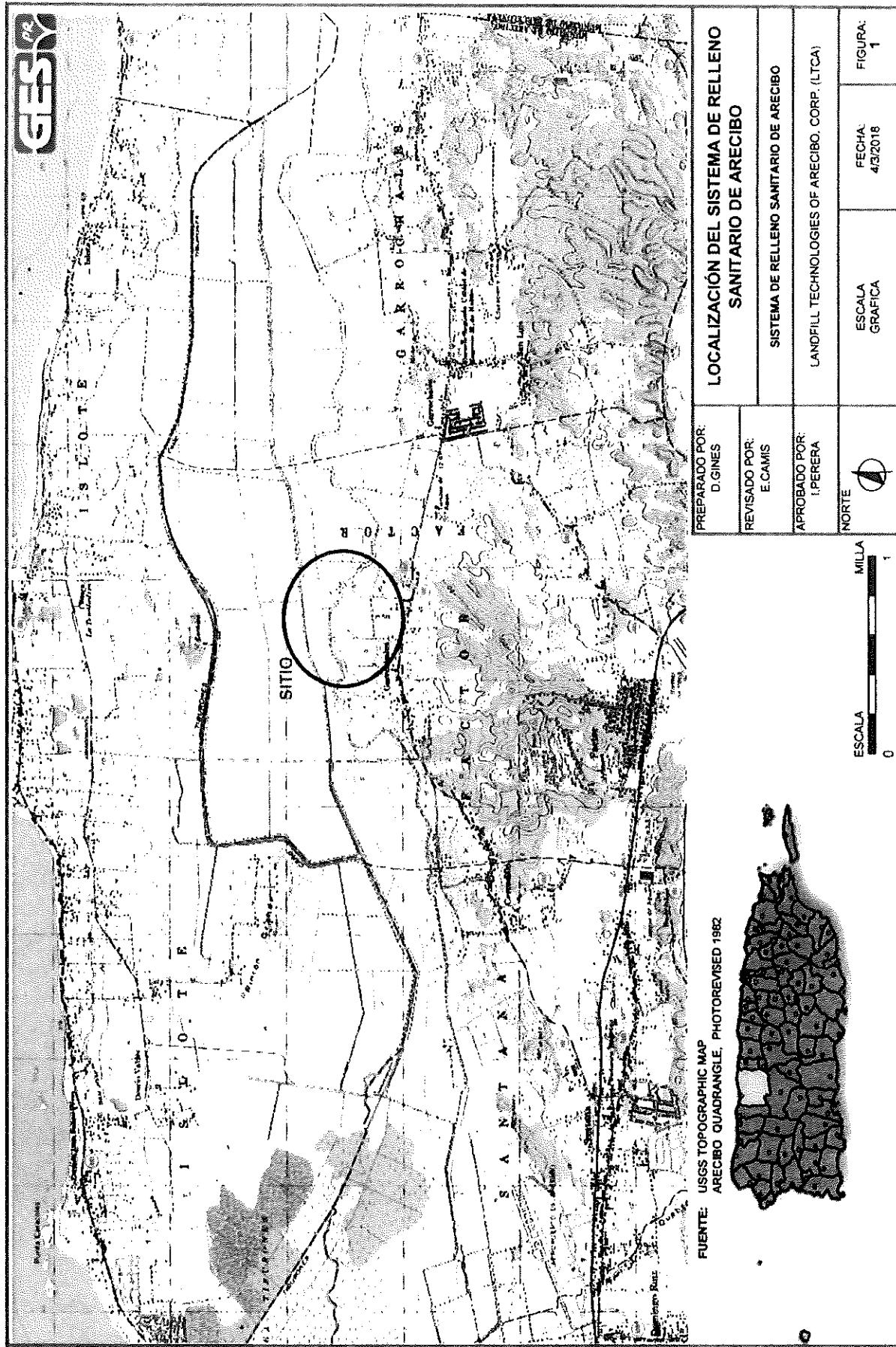
Texto ennegrecido corresponde a concentración que excede el MCL.

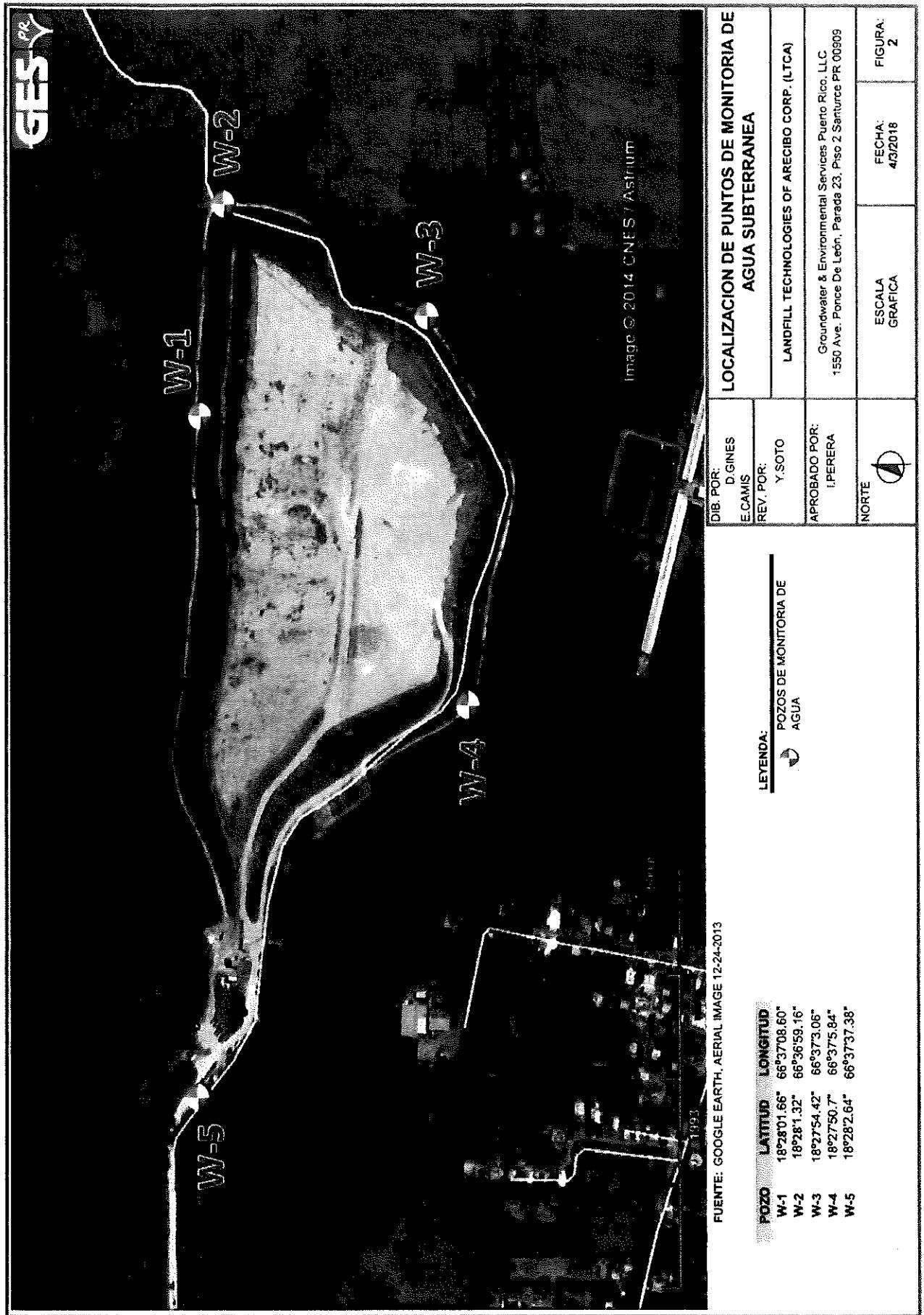
Referencias

Workplan and Quality Assurance Project Plan for Hydrogeologic Investigation and Groundwater Monitoring at the Arecibo's Municipal Sanitary Landfill, Arecibo, Puerto Rico (September, 2000).



Figuras





Apéndice A – Copia de Formularios de Campo

WELL DEVELOPMENT DATA		SRS ARECIBO	EVENT START TIME:						
DESCRIPTION OF WELL CONDITION		WELL ID AND TYPE	COMPLIANCE						
WEATHER	GROUNDWATER PRESENCE DATA								
DEPTH OF WATER BEFORE DEVELOPME	2.28ft		2.93ft 2.74 2.99ft						
DEPTH OF WATER AFTER DEVELOPMEN	11.28ft		14.21ft 14.35ft						
DEPTH OF WELL	WELL CONSTRUCTION DATA								
DEPTH OF WELL	30.0FT	41.60FT	46.16ft						
HEIGHT OF CASING	2.50FT	3.00FT	2.5 ft						
WELL DIAMETER	4 INCH	4 INCH	4 INCH						
LENGTH OF WATER COLUMN		16.23							
VOLUME OF WATER IN COLUMN		4.21							
VOLUMES TO BE REMOVED FROM WELL		12 gal							
WELL DEVELOPMENT DATA		PUMP/BAILER	PUMP/BAILER						
SURGE TECHNIQUE	PUMP/BAILER	1130							
SURGE START TIME									
SURGE END TIME		1207							
W-2		W-1							
DEVELOPMENT (3 VOLUMES)	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)	VOL (1)	VOL (2)	VOL (3)
FIELD PARAMETER DATA				4	4	4			
GALLONS				31.12	39.65	41.36			
WATER LEVEL (FT)									
TIME (AM OR PM)	Area A	1140	1151	1203					
TEMP (°C)				26.54	26.47	26.39			
SPECIFIC CONDUCTANCE(mS/cm)				934	919	910			
PH				10.25	10.19	10.13			
TURBIDITY (nw)				0R	0.15	0.54			
DO (%)				0.19	0.13	0.22			
SALINITY				0.28	0.20	0.19			
COLOR				clear	clear	clear			
ODOR				no	no	no			
SAMPLE TIME				W-1 (1205) vs-10 (1207)					
COMMENTS				One rebar, felt cascade					
EQUIPMENT				YSI PLUS					
LOGGED IN THE FIELD BY:	E. L. H.	END OF EVENT AT (TIME):	1340	SIGNATURE	Frank G. Jones				

* OR - Over rate

818040-BF - LSEI

WELL DEVELOPMENT DATA		SRS ARECIBO		EVENT START TIME:	
DESCRIPTION OF WELL CONDITION		WELL I.D. AND TYPE		COMPLIANCE	
WEATHER		UPGRADIENT W-5		W-4	
WEATHER		<i>Cloudy</i>		W-3 <i>No blade</i>	
DEPTH OF WATER BEFORE DEVELOPMEN		GROUNDWATER PRESENCE DATA			
DEPTH OF WATER AFTER DEVELOPMEN		3.56		9/19 44	
DEPTH OF WATER AFTER DEVELOPMEN		8.87		11/54 44	
WELL CONSTRUCTION DATA		WELL CONSTRUCTION DATA			
DEPTH OF WELL		42.00FT		54FT	
HEIGHT OF CASING		2.50FT		2.5FT	
WELL DIAMETER		4 INCH		4 INCH	
LENGTH OF WATER COLUMN		32.44		44.81	
VOLUME OF WATER IN COLUMN		24.92		32.12	
VOLUMES TO BE REMOVED FROM WELL		7.5gal		8.5gal	
WELL DEVELOPMENT DATA		WELL DEVELOPMENT DATA			
SURGE TECHNIQUE		PUMP/BAILER		PUMP/BAILER	
SURGE START TIME		12/18		0923	
SURGE END TIME		13/29		1019	
DEVELOPMENT (3 VOLUMES)		W-5		W-4	
FIELD PARAMETER DATA		VOL (1)		VOL (2)	
GALLONS		255		255	
WATER LEVEL (FT)		11.70		13.27	
TIME (AM OR PM)		13:00		0938	
TEMP (°C)		25.73		26.91	
SPECIFIC CONDUCTANCE(mS/cm)		241		2374	
PH		10.78		12.67	
TURBIDITY (ntu)		0.8		5.72ntu	
DO (%)		0.16		0.17	
SALINITY		0.41		0.41	
COLOR		light brown		clear	
ODOR		no		no	
SAMPLE TIME		W-5 (1327) W-5N (1329)		W-4 (1017) W-4D (104)	
COMMENTS		<i>water good</i>		<i>water good</i>	
EQUIPMENT		YSI MULTI PLUS			
LOGGED IN THE FIELD BY:		G. Shae		SIGNATURE	
END OF EVENT AT (TIME):		1340			

OK - over rate

Apéndice B – Cadenas de Custodia

WO# : 2073745

Pace Analytics
www.paceanalytic.comSection A
Required Client Information

Company: **GES PR** Report To: **Edgar Casas**
 Address: **550 Ave Bae de Leon Block 23** Copy To:
Apo 2 ST 12 00900
 Purchase Order No.: **7042**
 Email To: **Edgarcasas@exede.com**
 Phone: **721-1416** Fax:
 Requested Due Date/AT: **STD** Project Number: **70421**

IN-OF-CUSTODY / Analytical Request Document

In-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

2073745

Section C

Invoice Information:

Attention: **Edgar Casas**
 Company Name: **GES PR**
REGULATORY AGENCY
 Address: **Suite**
 Pace Quote Reference:
 Manager: **Juan Edelvado**
 Pace Profile #: **Acc150**
 Site Location: **Acc150**
 STATE: **PR**

DRINKING WATER
 NPDES GROUND WATER ✓ OTHER **E&B**
 UST RCRA
 Residual Chlorine (Y/N)

Requested Analysis Filtered (Y/N)															
SAMPLE ID (A-Z, 0-9, -,)	ITEM #	COLLECTED			Preservatives			# OF CONTAINERS			SAMPLE TEMP AT COLLECTION	Urtipreserved	Analytes Test	Residual Chlorine (Y/N)	
		MATRIX CODE	MATRIX CODE	COMPOSITE START	COMPOSITE END/GRAV	Preservative	Preservative	Preservative	Preservative	Preservative					
1	Trip Blank	WT G	WT G	040318 1205	WT G	WT G	WT G	WT G	WT G	WT G	2	X			
2	W-1	WT G	WT G	040318 1205	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
3	W-1D	WT G	WT G	040318 1207	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
4	W-3	WT G	WT G	040318 1114	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
5	W-3D	WT G	WT G	040318 1116	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
6	W-4	WT G	WT G	040318 1017	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
7	W-4D	WT G	WT G	040318 1019	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
8	W-5	WT G	WT G	040318 1327	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
9	W-5D	WT G	WT G	040318 1329	WT G	WT G	WT G	WT G	WT G	WT G	3	X			
10	EB-040318	WT G	WT G	040318 1331	WT G	WT G	WT G	WT G	WT G	WT G	2	1			
11															
12															
ADDITIONAL COMMENTS		REINFORDED BY / AFFILIATION			ACCEPTED BY / AFFILIATION			DATE			TIME			SAMPLE CONDITIONS	
EDD: SRS Araciba-Lab-07.mnw		Edgar Casas			Pace			4/4/18 14:49:30			Y			Y	
JIB61_E040318.zip		Federico Lopez			Federico Lopez			4/3/18 17:10			N			N	
Email: ges@gespr.com		FedEx			FedEx			4-4-18 8:15			12:27:35			S	
Original		Edgar Casas			Edgar Casas			DATE Signed (MM/DD/YY):			04/03/18			S	
Samples Shipped (Y/N)		Custodial Collector (Y/N)			Sampled Collector (Y/N)			Temp in C			Received on (Y/N)			F-ALL-O-020 rev.07 15-Mar-2007	

Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agree to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

Sample Condition Upon Receipt

WO# : 2073745

PM: JAR1

Due Date: 04/17/18

CLIENT: 98-GES PR

Project #:

Courier:	Pace Courier	Hyd Courier	Fed X	UPS	DHL	USPS	<input checked="" type="checkbox"/> Customer	Other
Custody Seal on Cooler Box Present				[see COC]				

Custody Seals intact: Yes No

Thermometer Used:	Therm Fisher IR 4 Therm Fisher IR 6 Therm Fisher IR 7
-------------------	---

Type of Ice:



Blue None

Samples on ice [see COC]

Cooler Temperature [see COC]

Temp should be above freezing to 6 C

Date and Initials of person examining contents: 4-3-18 JFH

Temp must be measured from Temperature blank when present

Comments

Temperature Blank Present?	<input checked="" type="checkbox"/>	No	NA	1
Chain of Custody Present	<input checked="" type="checkbox"/>	No	NA	2
Chain of Custody Complete	<input checked="" type="checkbox"/>	No	NA	3
Chain of Custody Relinquished	<input checked="" type="checkbox"/>	No	NA	4
Sampler Name & Signature on COC	<input checked="" type="checkbox"/>	No	NA	5
Samples Arrived within Hold Time	<input checked="" type="checkbox"/>	No	NA	6
Sufficient Volume	<input checked="" type="checkbox"/>	No	NA	7
Correct Containers Used	<input checked="" type="checkbox"/>	No	NA	8
Filtered vol Rec for Diss tests	<input checked="" type="checkbox"/>	No	NA	9
Sample Labels match COC	<input checked="" type="checkbox"/>	No	NA	10
All containers received within manufacturer's precautionary and/or expiration dates	<input checked="" type="checkbox"/>	No	NA	11
All containers needing chemical preservation have been checked (except VOA coliform & O&G)	<input checked="" type="checkbox"/>	No	NA	12
All containers preservation checked found to be in compliance with EPA recommendation	<input checked="" type="checkbox"/>	No	NA	13
Headspace in VOA Vials (>6mm)	<input checked="" type="checkbox"/>	No	NA	14
Trap Blank Present	<input checked="" type="checkbox"/>	No	NA	15

Client Notification/ Resolution

Person Contacted _____ Date/Time _____

Comments/ Resolution _____



Sample Condition Upon Receipt

1000 Riverbend Blvd., Suite F
St Rose, LA 70087

Project #: 20

Courier: Pace Courier Hired Courier Fed X UPS DHL USPS Customer OtherCustody Seal on Cooler/Box Present: (see COC)Custody Seals intact: Yes No

Thermometer Used:	<input type="checkbox"/> Therm Fisher IR 5 <input type="checkbox"/> Therm Fisher IR 6 <input checked="" type="checkbox"/> Therm Fisher IR 7
-------------------	---

Type of Ice: Wet Blue NoneSamples on ice: (see COC)Cooler Temperature: (see COC)

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 11/18/13 JMB

Temp must be measured from Temperature blank when present

Comments:

Temperature Blank Present?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	1
Chain of Custody Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Chain of Custody Complete:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Sufficient Volume:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Filtered vol. Rec. for Diss. tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	9
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
All containers received within manufacturer's precautionary and/or expiration dates.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13 If No, was preservative added? <input type="checkbox"/> Yes <input type="checkbox"/> No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15

Client Notification/ Resolution:

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Apéndice C – Informe de Resultados de Laboratorio Certificados

April 09, 2018

Isidro Perera
GES PR
1550 Ave. Ponce De Leon Ave
Stop 23, Suite 2
San Juan, PR 009091725

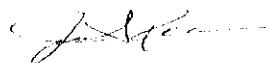
RE: Project: SRS ARECIBO (7101421)
Pace Project No.: 2073745

Dear Isidro Perera:

Enclosed are the analytical results for sample(s) received by the laboratory on April 03, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Juan Redondo
juan.redondo@pacelabs.com
(787)720-0319
Project Manager

Enclosures

cc: Efrain Camis
Laura Lugo



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project SRS ARECIBO (7101421)
Pace Project No 2073745

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch
11277CA
Florida Department of Health (NELAC) E87595
Illinois Environmental Protection Agency 0025721
Kansas Department of Health and Environment (NELAC)
E-10266
Louisiana Dept. of Environmental Quality (NELAC/ELAP),
02006

Pennsylvania Dept. of Env Protection (NELAC) 68-04202
Texas Commission on Env. Quality (NELAC)
T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import P330-10-
00119
Commonwealth of Virginia (TNI) 480246

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SAMPLE SUMMARY

Project SRS ARECIBO (7101421)
Pace Project No 2073745

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2073745001	TRIP BLANK	Water	04/03/18 00:00	04/03/18 14:49
2073745002	W-1	Water	04/03/18 12:05	04/03/18 14:49
2073745003	W-1D	Water	04/03/18 12:07	04/03/18 14:49
2073745004	W-3	Water	04/03/18 11:14	04/03/18 14:49
2073745005	W-3D	Water	04/03/18 11:16	04/03/18 14:49
2073745006	W-4	Water	04/03/18 10:17	04/03/18 14:49
2073745007	W-4D	Water	04/03/18 10:19	04/03/18 14:49
2073745008	W-5	Water	04/03/18 13:27	04/03/18 14:49
2073745009	W-5D	Water	04/03/18 13:29	04/03/18 14:49
2073745010	FB-040318	Water	04/03/18 13:37	04/03/18 14:49

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project SRS ARECIBO (7101421)
Pace Project No.: 2073745

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
2073745001	TRIP BLANK	EPA 8260	JRP	48	PASI-N
2073745002	W-1	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745003	W-1D	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745004	W-3	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745005	W-3D	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745006	W-4	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745007	W-4D	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745008	W-5	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745009	W-5D	EPA 6010	MHB1	15	PASI-N
		EPA 8260	JRP	48	PASI-N
2073745010	FB-040318	EPA 8260	JRP	48	PASI-N

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project SRS ARECIBO (7101421)
Pace Project No 2073745

Method: EPA 6010

Description: 6010 Metals, Total

Client: GES PR

Date: April 09, 2018

General Information:

8 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of-custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project SRS ARECIBO (7101421)
Pace Project No 2073745

Method: EPA 8260

Description: 8260 MSV

Client: GES PR

Date: April 09, 2016

General Information:

10 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of-custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 105941

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS



Project: SRS ARECIBO (7101421)
Pace Project No: 2073745

Sample: TRIP BLANK	Lab ID: 2073745001	Collected: 04/03/18 00:00	Received:	Water			
Parameters	Results	Units	Report Limit	DF	Prepared	CAS No	Qual
8260 MSV						Analytical Method: EPA 8260	
Acetone	0.026	mg/L	0.010	1		04/04/18 16:12	67-64-1
Benzene	ND	mg/L	0.0050	1		04/04/18 16:12	71-43-2
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 16:12	75-27-4
Bromoform	ND	mg/L	0.0050	1		04/04/18 16:12	75-25-2
Bromomethane	ND	mg/L	0.0050	1		04/04/18 16:12	74-83-9
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 16:12	78-93-3
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 16:12	75-15-0
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 16:12	56-23-5
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:12	108-90-7
Chloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	75-00-3
Chloroform	ND	mg/L	0.0050	1		04/04/18 16:12	67-66-3
Chloromethane	ND	mg/L	0.0050	1		04/04/18 16:12	74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 16:12	96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 16:12	124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 16:12	106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:12	95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:12	541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:12	106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 16:12	75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	107-06-2
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:12	75-35-4
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:12	156-59-2
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:12	156-60-5
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 16:12	78-87-5
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:12	10061-01-5
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:12	10061-02-6
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 16:12	100-41-4
2-Hexanone	ND	mg/L	0.010	1		04/04/18 16:12	591-78-6
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 16:12	98-82-8
Methyl acetate	ND	mg/L	0.010	1		04/04/18 16:12	79-20-9
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 16:12	75-09-2
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 16:12	108-10-1
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 16:12	1634-04-4
Styrene	ND	mg/L	0.0050	1		04/04/18 16:12	100-42-5
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	79-34-5
Tetrachloroethene	ND	mg/L	0.0050	1		04/04/18 16:12	127-18-4
Toluene	ND	mg/L	0.0050	1		04/04/18 16:12	108-88-3
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	71-55-6
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:12	79-00-5
Trichloroethene	ND	mg/L	0.0050	1		04/04/18 16:12	79-01-6
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 16:12	75-69-4
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 16:12	75-01-4
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 16:12	179601-23-1
o-Xylene	ND	mg/L	0.0050	1		04/04/18 16:12	95-47-6
Surrogates							
Toluene-d8 (S)	106	%	76-124	1		04/04/18 16:12	2037-26-5

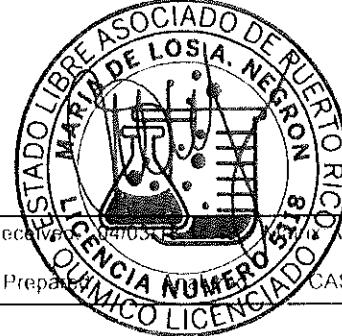
REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745



Sample: TRIP BLANK Lab ID: 2073745001 Collected 04/03/18 00:00 Received 04/03/18 14:49 Matrix Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV Analytical Method: EPA 8260								
Surrogates								
4-Bromofluorobenzene (S)	102	%	78-121	1		04/04/18 16:12	460-00-4	
Dibromoefluoromethane (S)	95	%	74-128	1		04/04/18 16:12	1868-53-7	

Sample: W-1 Lab ID: 2073745002 Collected 04/03/18 12:05 Received 04/03/18 14:49 Matrix Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
6010 Metals, Total Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 12:47	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 12:47	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 12:47	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 12:47	7440-43-9	
Chromium	0.016	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-48-4	
Copper	0.14	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-50-8	
Lead	0.0077	mg/L	0.0050	1	04/05/18 07:59	04/06/18 12:47	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 12:47	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 12:47	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 12:47	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 12:47	7440-62-2	
Zinc	0.12	mg/L	0.020	1	04/05/18 07:59	04/06/18 12:47	7440-66-6	

Sample: W-1 Lab ID: 2073745002 Collected 04/03/18 12:05 Received 04/03/18 14:49 Matrix Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV Analytical Method: EPA 8260								
Acetone	ND	mg/L	0.010	1		04/04/18 16:29	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 16:29	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 16:29	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/04/18 16:29	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/04/18 16:29	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 16:29	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 16:29	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 16:29	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:29	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/04/18 16:29	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/04/18 16:29	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 16:29	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 16:29	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 16:29	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:29	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:29	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:29	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 16:29	75-71-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project : SRS ARECIBO (7101421)
Pace Project No. : 2073745

Sample: W-1 Lab ID: 2073745002 Collected: 04/03/18 12:05 Received: 04/03/18 14:49 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV								
	Analytical Method: EPA 8260							
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:29	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:29	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:29	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 16:29	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:29	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:29	10061-02-6	
Ethylbenzene	0.012	mg/L	0.0050	1		04/04/18 16:29	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/04/18 16:29	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 16:29	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/04/18 16:29	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 16:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 16:29	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 16:29	1634-04-4	
Styrene	0.048	mg/L	0.0050	1		04/04/18 16:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	79-34-5	
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 16:29	127-18-4	
Toluene	0.024	mg/L	0.0050	1		04/04/18 16:29	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:29	79-00-5	
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 16:29	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 16:29	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 16:29	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 16:29	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 16:29	95-47-6	
Surrogates								
Toluene-d8 (S)	106	%	76-124	1		04/04/18 16:29	2037-26-5	
4-Bromofluorobenzene (S)	105	%	78-121	1		04/04/18 16:29	460-00-4	
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 16:29	1868-53-7	

Sample: W-1D Lab ID: 2073745003 Collected: 04/03/18 12:07 Received: 04/03/18 14:49 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
6010 Metals, Total								
	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:16	7440-36-0	
Arsenic	0.035	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:16	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:16	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:16	7440-43-9	
Chromium	0.089	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-48-4	
Copper	0.26	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-50-8	
Lead	0.019	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:16	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:16	7440-02-0	

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No 2073745



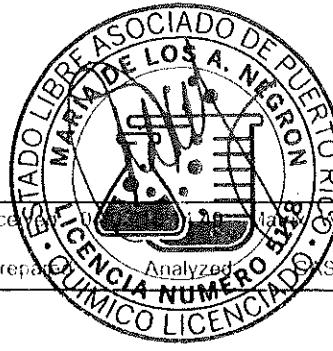
Sample: W-1D	Lab ID: 2073745003	Collected	04/03 18 12:07	Received	Prepared	Analyzed	Analyst No	Qual
Parameters	Results	Units	Report Limit	DF				
6010 Metals, Total								
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:16	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:16	7440-28-0	
Vanadium	0.071	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:16	7440-62-2	
Zinc	0.23	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:16	7440-66-6	
8260 MSV								
	Analytical Method: EPA 8260							
Acelone	ND	mg/L	0.010	1		04/04/18 16:47	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 16:47	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 16:47	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/04/18 16:47	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/04/18 16:47	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 16:47	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 16:47	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 16:47	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:47	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/04/18 16:47	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/04/18 16:47	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 16:47	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 16:47	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 16:47	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:47	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:47	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 16:47	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 16:47	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:47	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:47	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 16:47	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 16:47	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:47	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 16:47	10061-02-6	
Ethylbenzene	0.012	mg/L	0.0050	1		04/04/18 16:47	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/04/18 16:47	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 16:47	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/04/18 16:47	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 16:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 16:47	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 16:47	1634-04-4	
Styrene	0.054	mg/L	0.0050	1		04/04/18 16:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/04/18 16:47	127-18-4	
Toluene	0.026	mg/L	0.0050	1		04/04/18 16:47	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 16:47	79-00-5	

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745



Sample: W-1D	Lab ID: 2073745003	Collected 04/03/18 12:07	Received 04/03/18 14:49	Matrix Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV	Analytical Method: EPA 8260							
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 16:47	79-01-6	
Trifluoromethane	ND	mg/L	0.0050	1		04/04/18 16:47	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 16:47	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 16:47	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 16:47	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%	76-124	1		04/04/18 16:47	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-121	1		04/04/18 16:47	460-00-4	
Dibromofluoromethane (S)	94	%	74-128	1		04/04/18 16:47	1868-53-7	
Sample: W-3	Lab ID: 2073745004	Collected 04/03/18 11:14	Received 04/03/18 14:49	Matrix Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
6010 Metals, Total	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:20	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-38-2	
Banum	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:20	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:20	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:20	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-48-4	
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:20	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:20	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:20	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:20	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:20	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:20	7440-66-6	
8260 MSV	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/04/18 17:05	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 17:05	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 17:05	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/04/18 17:05	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/04/18 17:05	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 17:05	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 17:05	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 17:05	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:05	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/04/18 17:05	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/04/18 17:05	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 17:05	96-12-8	

REPORT OF LABORATORY ANALYSIS

ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No 2073745

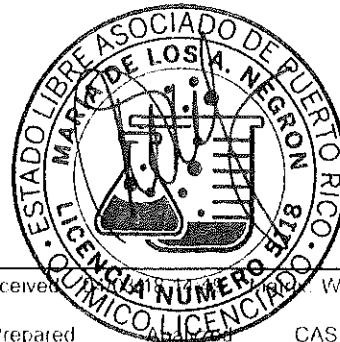


Sample: W-3	Lab ID: 2073745004	Collected: 04/03/18 11:14	Received: 04/03/18 14:49	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV Analytical Method: EPA 8260								
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 17:05	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 17:05	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:05	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:05	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:05	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 17:05	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	107-06-2	
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:05	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:05	156-59-2	
trans-1,2-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:05	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 17:05	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:05	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:05	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 17:05	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/04/18 17:05	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 17:05	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/04/18 17:05	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 17:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 17:05	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 17:05	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/04/18 17:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	79-34-5	
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 17:05	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/04/18 17:05	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:05	79-00-5	
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:05	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 17:05	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 17:05	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 17:05	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 17:05	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%	76-124	1		04/04/18 17:05	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-121	1		04/04/18 17:05	460-00-4	
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 17:05	1868-53-7	

Sample: W-3D	Lab ID: 2073745005	Collected: 04/03/18 11:16	Received: 04/03/18 14:49	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
6010 Metals, Total Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:32	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:32	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:32	7440-41-7	

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745

Sample: W-3D Lab ID: 2073745005 Collected 04/03/18 11:16 Received 04/05/18 07:59 Water

Parameters	Results	Units	Report Limit	DF	Prepared	CAS No.	Qual
6010 Metals, Total							
			Analytical Method: EPA 6010 Preparation Method: EPA 3010				
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:32	7440-43-9
Chromium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-47-3
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-48-4
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-50-8
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:32	7439-92-1
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:32	7440-02-0
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:32	7782-49-2
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-22-4
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:32	7440-28-0
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:32	7440-62-2
Zinc	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:32	7440-66-6
8260 MSV							
			Analytical Method: EPA 8260				
Acetone	0.014	mg/L	0.010	1		04/04/18 17:23	67-64-1
Benzene	ND	mg/L	0.0050	1		04/04/18 17:23	71-43-2
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 17:23	75-27-4
Bromoform	ND	mg/L	0.0050	1		04/04/18 17:23	75-25-2
Bromomethane	ND	mg/L	0.0050	1		04/04/18 17:23	74-83-9
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 17:23	78-93-3
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 17:23	75-15-0
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 17:23	56-23-5
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:23	108-90-7
Chloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	75-00-3
Chloroform	ND	mg/L	0.0050	1		04/04/18 17:23	67-66-3
Chloromethane	ND	mg/L	0.0050	1		04/04/18 17:23	74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 17:23	96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 17:23	124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 17:23	106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:23	95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:23	541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:23	106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 17:23	75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	107-06-2
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:23	75-35-4
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:23	156-59-2
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:23	156-60-5
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 17:23	78-87-5
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:23	10061-01-5
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:23	10061-02-6
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 17:23	100-41-4
2-Hexanone	ND	mg/L	0.010	1		04/04/18 17:23	591-78-6
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 17:23	98-82-8
Methyl acetate	ND	mg/L	0.010	1		04/04/18 17:23	79-20-9
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 17:23	75-09-2
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 17:23	108-10-1
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 17:23	1634-04-4

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ANALYTICAL RESULTS

Project: SRS ARECIBO (7101421)
Pace Project No.: 2073745

Sample: W-3D	Lab ID: 2073745005	Collected: 04/03/18 11:16	Received: 04/03/18 14:49	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260						
Styrene	ND	mg/L	0.0050	1		04/04/18 17:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	79-34-5	
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 17:23	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/04/18 17:23	106-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:23	79-09-5	
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:23	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 17:23	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 17:23	75-01-4	
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 17:23	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 17:23	95-47-6	
Surrogates								
Toluene-d8 (S)	104	%	76-124	1		04/04/18 17:23	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-121	1		04/04/18 17:23	460-00-4	
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 17:23	1866-53-7	
Sample: W-4		Lab ID: 2073745006	Collected: 04/03/18 10:17	Received: 04/03/18 14:49	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:36	7440-36-0	
Arsenic	0.011	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:36	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:36	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:36	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-48-4	
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:36	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:36	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:36	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:36	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:36	7440-62-2	
Zinc	0.13	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:36	7440-66-6	
8260 MSV		Analytical Method: EPA 8260						
Acetone	0.028	mg/L	0.010	1		04/04/18 17:41	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 17:41	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 17:41	75-27-4	
Bromoflorm	ND	mg/L	0.0050	1		04/04/18 17:41	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/04/18 17:41	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 17:41	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 17:41	75-15-0	

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745

Sample: W-4	Lab ID: 2073745006	Collected: 04/03/18 10:17	Received: 04/04/18 14:49	Water			
Parameters	Results	Units	Report Limit	DF	Prepared	CAS No	Qual
8260 MSV	Analytical Method: EPA 8260						
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 17:41	56-23-5
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:41	108-90-7
Chloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	75-00-3
Chloroform	ND	mg/L	0.0050	1		04/04/18 17:41	67-66-3
Chloromethane	ND	mg/L	0.0050	1		04/04/18 17:41	74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 17:41	96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 17:41	124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 17:41	106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:41	95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:41	541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:41	106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 17:41	75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	107-06-2
1,1-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:41	75-35-4
cis-1,2-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:41	156-59-2
trans-1,2-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:41	156-60-5
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 17:41	78-87-5
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:41	10061-01-5
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:41	10061-02-6
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 17:41	100-41-4
2-Hexanone	ND	mg/L	0.010	1		04/04/18 17:41	591-78-6
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 17:41	98-82-8
Methyl acetate	ND	mg/L	0.010	1		04/04/18 17:41	79-20-9
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 17:41	75-09-2
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 17:41	108-10-1
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 17:41	1634-04-4
Styrene	ND	mg/L	0.0050	1		04/04/18 17:41	100-42-5
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	79-34-5
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 17:41	127-18-4
Toluene	ND	mg/L	0.0050	1		04/04/18 17:41	108-88-3
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	71-55-6
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:41	79-00-5
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:41	79-01-6
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 17:41	75-69-4
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 17:41	75-01-4
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 17:41	179601-23-1
o-Xylene	ND	mg/L	0.0050	1		04/04/18 17:41	95-47-6
Surrogates							
Toluene-d8 (S)	106	%	76-124	1		04/04/18 17:41	2037-26-5
4-Bromofluorobenzene (S)	103	%	78-121	1		04/04/18 17:41	460-00-4
Dibromofluoromethane (S)	96	%	74-128	1		04/04/18 17:41	1868-53-7

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745



Sample: W-4D	Lab ID: 2073745007	Collected 04/03/18 10:19	Received 04/05/18 07:59	DF 1	Prepared 04/05/18 07:59	Analyst M. V. M.	Method EPA 6010	Qual
Parameters	Results	Units	Report Limit					
6010 Metals, Total								
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:40	7440-36-0	
Arsenic	0.014	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:40	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:40	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:40	7440-43-9	
Chromium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-48-4	
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:40	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:40	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:40	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:40	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:40	7440-62-2	
Zinc	0.15	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:40	7440-66-6	
8260 MSV								
	Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/04/18 17:59	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 17:59	71-43-2	
Bronodichloromethane	ND	mg/L	0.0050	1		04/04/18 17:59	75-27-4	
Bromoform	ND	mg/L	0.0050	1		04/04/18 17:59	75-25-2	
Bromomethane	ND	mg/L	0.0050	1		04/04/18 17:59	74-83-9	
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 17:59	78-93-3	
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 17:59	75-15-0	
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 17:59	56-23-5	
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:59	108-90-7	
Chloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	75-00-3	
Chloroform	ND	mg/L	0.0050	1		04/04/18 17:59	67-66-3	
Chloromethane	ND	mg/L	0.0050	1		04/04/18 17:59	74-87-3	
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 17:59	96-12-8	
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 17:59	124-48-1	
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 17:59	106-93-4	
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:59	95-50-1	
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:59	541-73-1	
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 17:59	106-46-7	
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 17:59	75-71-8	
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	75-34-3	
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	107-06-2	
1,1-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:59	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 17:59	156-59-2	
trans-1,2-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 17:59	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 17:59	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:59	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 17:59	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 17:59	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/04/18 17:59	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 17:59	98-82-8	

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ANALYTICAL RESULTS



Project SRS ARECIBO (7101421)
Pace Project No 2073745

Sample: W-4D Lab ID: 2073745007 Collected 04/03/18 10:19 Received 04/03/18 14:49 Matrix Water

Parameters	Results	Units	Report Limit	DF	Prepared	LICENCIA QUIMICA NUMERO 1318	CAS No.	Qual
8260 MSV Analytical Method: EPA 8260								
Methyl acetate	ND	mg/L	0.010	1		04/04/18 17:59	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 17:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 17:59	108-10-1	
Methyl-Tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 17:59	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/04/18 17:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/04/18 17:59	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/04/18 17:59	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 17:59	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/04/18 17:59	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 17:59	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 17:59	75-01-4	
m,p-Xylene	ND	mg/L	0.010	1		04/04/18 17:59	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 17:59	95-47-6	
Surrogates								
Toluene-d8 (S)	105	%	76-124	1		04/04/18 17:59	2037-26-5	
4-Bromofluorobenzene (S)	103	%	78-121	1		04/04/18 17:59	460-00-4	
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 17:59	1866-53-7	

Sample: W-5 Lab ID: 2073745008 Collected 04/03/18 13:27 Received 04/03/18 14:49 Matrix Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 Metals, Total Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:44	7440-36-0	
Arsenic	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-38-2	
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:44	7440-39-3	
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:44	7440-41-7	
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:44	7440-43-9	
Chromium	0.010	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-47-3	
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-48-4	
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-50-8	
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:44	7439-92-1	
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:44	7440-02-0	
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:44	7782-49-2	
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-22-4	
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:44	7440-28-0	
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:44	7440-62-2	
Zinc	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:44	7440-66-6	
8260 MSV Analytical Method: EPA 8260								
Acetone	ND	mg/L	0.010	1		04/04/18 18:17	67-64-1	
Benzene	ND	mg/L	0.0050	1		04/04/18 18:17	71-43-2	
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 18:17	75-27-4	

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No. 2073745



Sample: W-5	Lab ID: 2073745008	Collected	04/03 18 13 27	Received	04/03 18 17 10:00 AM	Order
Parameters	Results	Units	Report Limit	DF	Prepared	Analyst
8260 MSV						Analytical Method: EPA 8260
Bromoform	ND	mg/L	0.0050	1		04/04/18 18 17 75-25-2
Bromomethane	ND	mg/L	0.0050	1		04/04/18 18 17 74-83-9
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 18 17 76-93-3
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 18 17 75-15-0
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 18 17 56-23-5
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 18 17 108-90-7
Chloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 75-00-3
Chloroform	ND	mg/L	0.0050	1		04/04/18 18 17 67-66-3
Chloromethane	ND	mg/L	0.0050	1		04/04/18 18 17 74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 18 17 96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 18 17 124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 18 17 106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18 17 95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18 17 541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18 17 106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 18 17 75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 107-06-2
1,1-Dichloroethylene	ND	mg/L	0.0050	1		04/04/18 18 17 75-35-4
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 18 17 156-59-2
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 18 17 156-60-5
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 18 17 78-87-5
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 18 17 10061-01-5
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 18 17 10061-02-6
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 18 17 100-41-4
2-Hexanone	ND	mg/L	0.010	1		04/04/18 18 17 591-78-6
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 18 17 98-82-8
Methyl acetate	ND	mg/L	0.010	1		04/04/18 18 17 79-20-9
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 18 17 75-09-2
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 18 17 108-10-1
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 18 17 1634-04-4
Styrene	ND	mg/L	0.0050	1		04/04/18 18 17 100-42-5
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 79-34-5
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 18 17 127-18-4
Toluene	ND	mg/L	0.0050	1		04/04/18 18 17 108-88-3
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 71-55-6
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18 17 79-00-5
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 18 17 79-01-6
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 18 17 75-69-4
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 18 17 75-01-4
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 18 17 179601-23-1
o-Xylene	ND	mg/L	0.0050	1		04/04/18 18 17 95-47-6
Surrogates						
Toluene-d8 (S)	106	%	76-124	1		04/04/18 18 17 2037-26-5
4-Bromofluorobenzene (S)	105	%	78-121	1		04/04/18 18 17 460-00-4
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 18 17 1868-53-7

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No 2073745

Sample: W-5D	Lab ID: 2073745009	Collected 04/03/18 13:29	Received 04/05/18 14:45	Analyst	Comments		
Parameters	Results	Units	Report Limit	DF	Prepared	QC No	Qual
6010 Metals, Total							Analytical Method: EPA 6010 Preparation Method: EPA 3010
Antimony	ND	mg/L	0.060	1	04/05/18 07:59	04/06/18 13:49	7440-36-0
Arsenic	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-38-2
Barium	ND	mg/L	0.20	1	04/05/18 07:59	04/06/18 13:49	7440-39-3
Beryllium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:49	7440-41-7
Cadmium	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:49	7440-43-9
Chromium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-47-3
Cobalt	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-48-4
Copper	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-50-8
Lead	ND	mg/L	0.0050	1	04/05/18 07:59	04/06/18 13:49	7439-92-1
Nickel	ND	mg/L	0.040	1	04/05/18 07:59	04/06/18 13:49	7440-02-0
Selenium	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:49	7782-49-2
Silver	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-22-4
Thallium	ND	mg/L	0.010	1	04/05/18 07:59	04/06/18 13:49	7440-28-0
Vanadium	ND	mg/L	0.050	1	04/05/18 07:59	04/06/18 13:49	7440-62-2
Zinc	ND	mg/L	0.020	1	04/05/18 07:59	04/06/18 13:49	7440-66-6
8260 MSV							Analytical Method: EPA 8260
Acetone	0.010	mg/L	0.010	1			04/04/18 18:35 67-64-1
Benzene	ND	mg/L	0.0050	1			04/04/18 18:35 71-43-2
Bromodichloromethane	ND	mg/L	0.0050	1			04/04/18 18:35 75-27-4
Bromoform	ND	mg/L	0.0050	1			04/04/18 18:35 75-25-2
Bromornethane	ND	mg/L	0.0050	1			04/04/18 18:35 74-83-9
2-Butanone (MEK)	ND	mg/L	0.010	1			04/04/18 18:35 78-93-3
Carbon disulfide	ND	mg/L	0.0050	1			04/04/18 18:35 75-15-0
Carbon tetrachloride	ND	mg/L	0.0050	1			04/04/18 18:35 56-23-5
Chlorobenzene	ND	mg/L	0.0050	1			04/04/18 18:35 108-90-7
Chloroethane	ND	mg/L	0.0050	1			04/04/18 18:35 75-00-3
Chloroform	ND	mg/L	0.0050	1			04/04/18 18:35 67-66-3
Chloromethane	ND	mg/L	0.0050	1			04/04/18 18:35 74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1			04/04/18 18:35 96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1			04/04/18 18:35 124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1			04/04/18 18:35 106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1			04/04/18 18:35 95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1			04/04/18 18:35 541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1			04/04/18 18:35 106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1			04/04/18 18:35 75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1			04/04/18 18:35 75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1			04/04/18 18:35 107-06-2
1,1-Dichloroethylene	ND	mg/L	0.0050	1			04/04/18 18:35 75-35-4
cis-1,2-Dichloroethylene	ND	mg/L	0.0050	1			04/04/18 18:35 156-59-2
trans-1,2-Dichloroethylene	ND	mg/L	0.0050	1			04/04/18 18:35 156-60-5
1,2-Dichloropropane	ND	mg/L	0.0050	1			04/04/18 18:35 78-87-5
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1			04/04/18 18:35 10061-01-5
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1			04/04/18 18:35 10061-02-6
Ethylbenzene	ND	mg/L	0.0050	1			04/04/18 18:35 100-41-4
2-Hexanone	ND	mg/L	0.010	1			04/04/18 18:35 591-78-6
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1			04/04/18 18:35 98-82-8

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No 2073745



Sample: W-5D	Lab ID: 2073745009	Collected	04/03/18 13:29	Received	04/03/18 14:49	Matrix: Water	Qual
Parameters	Results	Units	Report Limit	DF	Prepared		
8260 MSV Analytical Method: EPA 8260							
Methyl acetate	ND	mg/L	0.010	1		04/04/18 18:35	79-20-9
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 18:35	75-09-2
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 18:35	108-10-1
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 18:35	1634-04-4
Styrene	ND	mg/L	0.0050	1		04/04/18 18:35	100-42-5
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 18:35	79-34-5
Tetrachloroethylene	ND	mg/L	0.0050	1		04/04/18 18:35	127-18-4
Toluene	ND	mg/L	0.0050	1		04/04/18 18:35	108-88-3
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18:35	71-55-6
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18:35	79-00-5
Trichloroethylene	ND	mg/L	0.0050	1		04/04/18 18:35	79-01-6
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 18:35	75-69-4
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 18:35	75-01-4
m&p-Xylene	ND	mg/L	0.010	1		04/04/18 18:35	179601-23-1
o-Xylene	ND	mg/L	0.0050	1		04/04/18 18:35	95-47-6
Surrogates							
Toluene-d8 (S)	105	%	76-124	1		04/04/18 18:35	2037-26-5
4-Etomofluorobenzene (S)	103	%	78-121	1		04/04/18 18:35	460-00-4
Dibromo-fluoromethane (S)	94	%	74-128	1		04/04/18 18:35	1868-53-7

Sample: FB-040318	Lab ID: 2073745010	Collected	04/03/18 13:37	Received	04/03/18 14:49	Matrix: Water	Qual
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No
8260 MSV Analytical Method: EPA 8260							
Acetone	ND	mg/L	0.010	1		04/04/18 18:53	67-64-1
Benzene	ND	mg/L	0.0050	1		04/04/18 18:53	71-43-2
Bromodichloromethane	ND	mg/L	0.0050	1		04/04/18 18:53	75-27-4
Bromoform	ND	mg/L	0.0050	1		04/04/18 18:53	75-25-2
Bromomethane	ND	mg/L	0.0050	1		04/04/18 18:53	74-83-9
2-Butanone (MEK)	ND	mg/L	0.010	1		04/04/18 18:53	78-93-3
Carbon disulfide	ND	mg/L	0.0050	1		04/04/18 18:53	75-15-0
Carbon tetrachloride	ND	mg/L	0.0050	1		04/04/18 18:53	56-23-5
Chlorobenzene	ND	mg/L	0.0050	1		04/04/18 18:53	108-90-7
Chloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	75-00-3
Chloroform	ND	mg/L	0.0050	1		04/04/18 18:53	67-66-3
Chloromethane	ND	mg/L	0.0050	1		04/04/18 18:53	74-87-3
1,2-Dibromo-3-chloropropane	ND	mg/L	0.0050	1		04/04/18 18:53	96-12-8
Dibromochloromethane	ND	mg/L	0.0050	1		04/04/18 18:53	124-48-1
1,2-Dibromoethane (EDB)	ND	mg/L	0.0050	1		04/04/18 18:53	106-93-4
1,2-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18:53	95-50-1
1,3-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18:53	541-73-1
1,4-Dichlorobenzene	ND	mg/L	0.0050	1		04/04/18 18:53	106-46-7
Dichlorodifluoromethane	ND	mg/L	0.0050	1		04/04/18 18:53	75-71-8
1,1-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	75-34-3
1,2-Dichloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	107-06-2

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ANALYTICAL RESULTS

Project SRS ARECIBO (7101421)
Pace Project No 2073745

Sample: FB-040318	Lab ID: 2073745010	Collected 04/03/18 13:37	Received 04/03/18 14:49	Matrix Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No	Qual
8260 MSV		Analytical Method: EPA 8260						
1,1-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 18:53	75-35-4	
cis-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 18:53	156-59-2	
trans-1,2-Dichloroethene	ND	mg/L	0.0050	1		04/04/18 18:53	156-60-5	
1,2-Dichloropropane	ND	mg/L	0.0050	1		04/04/18 18:53	78-87-5	
cis-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 18:53	10061-01-5	
trans-1,3-Dichloropropene	ND	mg/L	0.0050	1		04/04/18 18:53	10061-02-6	
Ethylbenzene	ND	mg/L	0.0050	1		04/04/18 18:53	100-41-4	
2-Hexanone	ND	mg/L	0.010	1		04/04/18 18:53	591-78-6	
Isopropylbenzene (Cumene)	ND	mg/L	0.0050	1		04/04/18 18:53	98-82-8	
Methyl acetate	ND	mg/L	0.010	1		04/04/18 18:53	79-20-9	
Methylene Chloride	ND	mg/L	0.0050	1		04/04/18 18:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	mg/L	0.010	1		04/04/18 18:53	108-10-1	
Methyl-tert-butyl ether	ND	mg/L	0.0050	1		04/04/18 18:53	1634-04-4	
Styrene	ND	mg/L	0.0050	1		04/04/18 18:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	79-34-5	
Tetrachloroethene	ND	mg/L	0.0050	1		04/04/18 18:53	127-18-4	
Toluene	ND	mg/L	0.0050	1		04/04/18 18:53	108-88-3	
1,1,1-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	71-55-6	
1,1,2-Trichloroethane	ND	mg/L	0.0050	1		04/04/18 18:53	79-00-5	
Trichloroethene	ND	mg/L	0.0050	1		04/04/18 18:53	79-01-6	
Trichlorofluoromethane	ND	mg/L	0.0050	1		04/04/18 18:53	75-69-4	
Vinyl chloride	ND	mg/L	0.0020	1		04/04/18 18:53	75-01-4	
m,p-Xylene	ND	mg/L	0.010	1		04/04/18 18:53	179601-23-1	
o-Xylene	ND	mg/L	0.0050	1		04/04/18 18:53	95-47-6	
Surrogates								
Toluene-d8 (S)	106	%	76-124	1		04/04/18 18:53	2037-26-5	
4-Bromofluorobenzene (S)	104	%	78-121	1		04/04/18 18:53	460-00-4	
Dibromofluoromethane (S)	95	%	74-128	1		04/04/18 18:53	1868-53-7	



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QUALITY CONTROL DATA

Project SRS ARECIBO (7101421)
Pace Project No 2073745

OC Batch	105981	Analysis Method	EPA 6010
QC Batch Method	EPA 3010	Analysis Description	6010 MET
Associated Lab Samples	2073745002, 2073745003, 2073745004, 2073745005, 2073745006, 2073745007, 2073745008, 2073745009		

METHOD BLANK 456754 Matrix: Water

Associated Lab Samples 2073745002, 2073745003, 2073745004, 2073745005, 2073745006, 2073745007, 2073745008, 2073745009

Parameter	Units	Blank	Reporting		
		Result	Limit	Analyzed	Qualifiers
Antimony	mg/L	ND	0.060	04/06/18 12:31	
Arsenic	mg/L	ND	0.010	04/06/18 12:31	
Barium	mg/L	ND	0.20	04/06/18 12:31	
Beryllium	mg/L	ND	0.0050	04/06/18 12:31	
Cadmium	mg/L	ND	0.0050	04/06/18 12:31	
Chromium	mg/L	ND	0.010	04/06/18 12:31	
Cobalt	mg/L	ND	0.010	04/06/18 12:31	
Copper	mg/L	ND	0.010	04/06/18 12:31	
Lead	mg/L	ND	0.0050	04/06/18 12:31	
Nickel	mg/L	ND	0.040	04/06/18 12:31	
Selenium	mg/L	ND	0.020	04/06/18 12:31	
Silver	mg/L	ND	0.010	04/06/18 12:31	
Thallium	mg/L	ND	0.010	04/06/18 12:31	
Vanadium	mg/L	ND	0.050	04/06/18 12:31	
Zinc	mg/L	ND	0.020	04/06/18 12:31	

LABORATORY CONTROL SAMPLE 456755

Parameter	Units	Spike	LCS	LCS	% Rec	Limits	Qualifiers
		Conc	Result	% Rec			
Antimony	mg/L	1	1.0	100	85-115		
Arsenic	mg/L	1	1.0	101	85-115		
Barium	mg/L	1	0.99	99	85-115		
Beryllium	mg/L	1	1.0	100	85-115		
Cadmium	mg/L	1	1.0	100	85-115		
Chromium	mg/L	1	1.0	100	85-115		
Cobalt	mg/L	1	1.0	101	85-115		
Copper	mg/L	1	1.0	101	85-115		
Lead	mg/L	1	1.0	100	85-115		
Nickel	mg/L	1	1.0	100	85-115		
Selenium	mg/L	1	1.0	101	85-115		
Silver	mg/L	5	0.50	99	85-115		
Thallium	mg/L	1	1.0	101	85-115		
Vanadium	mg/L	1	1.0	100	85-115		
Zinc	mg/L	1	1.0	101	85-115		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SRS ARECIBO (7101421)
Pace Project No 2073745

MATRIX SPIKE & MATRIX SPIKE DUPLICATE		456756		456757											
Parameter	Units	MS		MSD		MS Result	% Rec	MSD Result	% Rec	% Rec	Units	RPD	RPD	Max	Qual
		2073745002	Spk	Conc	Spike	Conc									
Antimony	mg/L	ND	1	1	0.98	0.98	98	98	80-120	0	20				
Arsenic	mg/L	ND	1	1	1.0	1.0	100	101	80-120	0	20				
Barium	mg/L	ND	1	1	1.1	1.1	99	98	80-120	0	20				
Beryllium	mg/L	ND	1	1	0.99	0.99	99	99	80-120	0	20				
Cadmium	mg/L	ND	1	1	0.95	0.95	95	95	80-120	0	20				
Chromium	mg/L	0.016	1	1	0.98	0.97	96	96	80-120	0	20				
Cobalt	mg/L	ND	1	1	0.97	0.97	97	97	80-120	0	20				
Copper	mg/L	0.14	1	1	1.1	1.1	99	98	80-120	0	20				
Lead	mg/L	0.0077	1	1	0.96	0.96	96	95	80-120	0	20				
Nickel	mg/L	ND	1	1	0.96	0.95	95	95	80-120	0	20				
Selenium	mg/L	ND	1	1	0.96	0.97	96	97	80-120	1	20				
Silver	mg/L	ND	5	5	0.49	0.49	97	97	80-120	0	20				
Thallium	mg/L	ND	1	1	0.96	0.96	96	96	80-120	0	20				
Vanadium	mg/L	ND	1	1	1.0	1.0	100	101	80-120	0	20				
Zinc	mg/L	0.12	1	1	1.1	1.1	95	95	80-120	0	20				

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QUALITY CONTROL DATA

Project SRS ARECIBO (7101421)
Pace Project No.: 2073745

QC Batch:	105941	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV
Associated Lab Samples:	2073745001 2073745002 2073745003 2073745004 2073745005 2073745006 2073745007 2073745008 2073745009 2073745010		

METHOD BLANK	456451	Matrix	Water
Associated Lab Samples:	2073745001 2073745002 2073745003 2073745004 2073745005 2073745006 2073745007 2073745008 2073745009 2073745010		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	mg/L	ND	0.0050	04/04/18 15:18	
1,1,2,2-Tetrachloroethane	mg/L	ND	0.0050	04/04/18 15:18	
1,1,2-Trichloroethane	mg/L	ND	0.0050	04/04/18 15:18	
1,1-Dichloroethane	mg/L	ND	0.0050	04/04/18 15:18	
1,1-Dichloroethene	mg/L	ND	0.0050	04/04/18 15:18	
1,2-Dibromo-3-chloropropane	mg/L	ND	0.0050	04/04/18 15:18	
1,2-Dibromoethane (EDB)	mg/L	ND	0.0050	04/04/18 15:18	
1,2-Dichlorobenzene	mg/L	ND	0.0050	04/04/18 15:18	
1,2-Dichloroethane	mg/L	ND	0.0050	04/04/18 15:18	
1,2-Dichloropropane	mg/L	ND	0.0050	04/04/18 15:18	
1,3-Dichlorobenzene	mg/L	ND	0.0050	04/04/18 15:18	
1,4-Dichlorobenzene	mg/L	ND	0.0050	04/04/18 15:18	
2-Butanone (MEK)	mg/L	ND	0.010	04/04/18 15:18	
2-Hexanone	mg/L	ND	0.010	04/04/18 15:18	
4-Methyl-2-pentanone (MIBK)	mg/L	ND	0.010	04/04/18 15:18	
Acetone	mg/L	ND	0.010	04/04/18 15:18	
Benzene	mg/L	ND	0.0050	04/04/18 15:18	
Bromodichloromethane	mg/L	ND	0.0050	04/04/18 15:18	
Bromoform	mg/L	ND	0.0050	04/04/18 15:18	
Bromomethane	mg/L	ND	0.0050	04/04/18 15:18	
Carbon disulfide	mg/L	ND	0.0050	04/04/18 15:18	
Carbon tetrachloride	mg/L	ND	0.0050	04/04/18 15:18	
Chlorobenzene	mg/L	ND	0.0050	04/04/18 15:18	
Chloroethane	mg/L	ND	0.0050	04/04/18 15:18	
Chloroform	mg/L	ND	0.0050	04/04/18 15:18	
Chloromethane	mg/L	ND	0.0050	04/04/18 15:18	
cis-1,2-Dichloroethene	mg/L	ND	0.0050	04/04/18 15:18	
cis-1,3-Dichloropropene	mg/L	ND	0.0050	04/04/18 15:18	
Dibromochloromethane	mg/L	ND	0.0050	04/04/18 15:18	
Dichlorodifluoromethane	mg/L	ND	0.0050	04/04/18 15:18	
Ethylbenzene	mg/L	ND	0.0050	04/04/18 15:18	
Isopropylbenzene (Cumene)	mg/L	ND	0.0050	04/04/18 15:18	
m,p-Xylene	mg/L	ND	0.010	04/04/18 15:18	
Methyl acetate	mg/L	ND	0.010	04/04/18 15:18	
Methyl-tert-butyl ether	mg/L	ND	0.0050	04/04/18 15:18	
Methylene Chloride	mg/L	ND	0.0050	04/04/18 15:18	
o-Xylene	mg/L	ND	0.0050	04/04/18 15:18	
Styrene	mg/L	ND	0.0050	04/04/18 15:18	
Tetrachloroethene	mg/L	ND	0.0050	04/04/18 15:18	
Toluene	mg/L	ND	0.0050	04/04/18 15:18	

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QUALITY CONTROL DATA

Project SRS ARECIBO (7101421)
Pace Project No 2073745

METHOD BLANK	456451	Matrix	Water						
Associated Lab Samples		2073745001	2073745002	2073745003	2073745004	2073745005	2073745006	2073745007	2073745008
		2073745009	2073745010						

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,2-Dichloroethene	mg/L	ND	0.0050	04/04/18 15 18	
trans-1,3-Dichloropropene	mg/L	ND	0.0050	04/04/18 15 18	
Trichloroethylene	mg/L	ND	0.0050	04/04/18 15 18	
Trichlorofluoromethane	mg/L	ND	0.0050	04/04/18 15 18	
Vinyl chloride	mg/L	ND	0.0020	04/04/18 15 18	
4-Bromofluorobenzene (S)	%	104	78-121	04/04/18 15 18	
Dibromofluoromethane (S)	%	94	74-128	04/04/18 15 18	
Toluene-d8 (S)	%	106	76-124	04/04/18 15 18	

LABORATORY CONTROL SAMPLE 456452

Parameter	Units	Spike Conc	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	mg/L	.05	0.048	97	76-126	
1,1,2,2-Tetrachloroethane	mg/L	.05	0.043	87	65-129	
1,1,2-Trichloroethane	mg/L	.05	0.051	101	75-121	
1,1-Dichloroethane	mg/L	.05	0.052	103	71-127	
1,1-Dichloroethene	mg/L	.05	0.047	94	63-130	
1,2-Dibromo-3-chloropropane	mg/L	.05	0.050	100	59-131	
1,2-Dibromoethane (EDB)	mg/L	.05	0.051	102	75-125	
1,2-Dichlorobenzene	mg/L	.05	0.054	107	79-117	
1,2-Dichloroethane	mg/L	.05	0.047	95	65-131	
1,2-Dichloropropane	mg/L	.05	0.056	113	72-125	
1,3-Dichlorobenzene	mg/L	.05	0.053	105	77-117	
1,4-Dichlorobenzene	mg/L	.05	0.048	95	77-118	
2-Butanone (MEK)	mg/L	.05	0.054	109	34-170	
2-Hexanone	mg/L	.05	0.051	102	52-147	
4-Methyl-2-pentanone (MIBK)	mg/L	.05	0.051	103	58-141	
Acetone	mg/L	.05	0.052	104	16-192	
Benzene	mg/L	.05	0.045	89	74-132	
Bromodichloromethane	mg/L	.05	0.046	92	73-117	
Bromoform	mg/L	.05	0.045	89	58-132	
Bromomethane	mg/L	.05	0.026	51	47-157	
Carbon disulfide	mg/L	.05	0.045	91	52-145	
Carbon tetrachloride	mg/L	.05	0.052	105	68-129	
Chlorobenzene	mg/L	.05	0.054	108	79-121	
Chloroethane	mg/L	.05	0.036	73	34-160	
Chloroform	mg/L	.05	0.044	89	70-120	
Chloromethane	mg/L	.05	0.046	91	44-142	
cis-1,2-Dichloroethene	mg/L	.05	0.047	95	71-124	
cis-1,3-Dichloropropene	mg/L	.05	0.048	96	77-121	
Dibromochloromethane	mg/L	.05	0.049	98	67-122	
Dichlorodifluoromethane	mg/L	.05	0.028	56	28-148	
Ethylbenzene	mg/L	.05	0.053	105	79-116	

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QUALITY CONTROL DATA

Project SRS ARECIBO (7101421)
Pace Project No 2073745

LABORATORY CONTROL SAMPLE 456452		Spike Conc	ICS Result	LCS	% Rec	Qualifiers
Parameter	Units				Limits	
Isopropylbenzene (Cumene)	mg/L	.05	0.050	101	77-126	
m&p-Xylene	mg/L	1	0.11	111	78-119	
Methyl acetate	mg/L	.05	0.035	71	47-155	
Methyl-tert-butyl ether	mg/L	.05	0.042	64	58-135	
Methylene Chloride	mg/L	.05	0.046	91	49-145	
o-Xylene	mg/L	.05	0.054	107	77-121	
Styrene	mg/L	.05	0.056	113	81-123	
Tetrachloroethene	mg/L	.05	0.060	119	62-138	
Toluene	mg/L	.05	0.050	101	79-120	
trans-1,2-Dichloroethene	mg/L	.05	0.047	95	68-125	
trans-1,3-Dichloropropene	mg/L	.05	0.047	95	77-121	
Trichloroethene	mg/L	.05	0.051	102	77-117	
Trichlorofluoromethane	mg/L	.05	0.030	60	45-164	
Vinyl chloride	mg/L	.05	0.039	77	48-130	
4-Bromofluorobenzene (S)	%			103	78-121	
Dibromofluoromethane (S)	%			95	74-128	
Toluene-d8 (S)	%			105	76-124	

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QUALIFIERS

Project SRS ARECIBO (7101421)
Pace Project No 2073745

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot
ND - Not Detected at or above adjusted reporting limit
TNTC - Too Numerous To Count
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit
MDL - Adjusted Method Detection Limit
PQL - Practical Quantitation Limit
RL - Reporting Limit
S - Surrogate
1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The Nelac Institute

LABORATORIES

PASI-N Pace Analytical Services - New Orleans

BATCH QUALIFIERS

Batch: 105941

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SRS ARECIBO (7101421)
Pace Project No.: 2073745

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2073745002	W-1	EPA 3010	105991	EPA 6010	106108
2073745003	W-1D	EPA 3010	105991	EPA 6010	106108
2073745004	W-3	EPA 3010	105991	EPA 6010	106108
2073745005	W-3D	EPA 3010	105991	EPA 6010	106108
2073745006	W-4	EPA 3010	105991	EPA 6010	106108
2073745007	W-4D	EPA 3010	105991	EPA 6010	106108
2073745008	W-5	EPA 3010	105991	EPA 6010	106108
2073745009	W-5D	EPA 3010	105991	EPA 6010	106108
2073745001	TRIP BLANK	EPA 8260	105941		
2073745002	W-1	EPA 8260	105941		
2073745003	W-1D	EPA 8260	105941		
2073745004	W-3	EPA 8260	105941		
2073745005	W-3D	EPA 8260	105941		
2073745006	W-4	EPA 8260	105941		
2073745007	W-4D	EPA 8260	105941		
2073745008	W-5	EPA 8260	105941		
2073745009	W-5D	EPA 8260	105941		
2073745010	FB-040318	EPA 8260	105941		

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Face Analysis

2073745

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Project Name		Regulatory Agency	
Owner	Address	Permit No.	Permit Date
GES ph	Elbow Canal	GES ph	None
550 Abalone Beach Dr	2510 Abalone Beach Dr	None	None

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SAMPLE NAME AND SIGNATURE	
PRINT Name of SAMPLER	<i>Eduardo Sánchez</i>
SIGNATURE of SAMPLER	
DATE Signed NAME OF YY:	
10/20/15	

Project #:

Courier

Custody Seal Intact

Custody Seals intact

Thermometer Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<input checked="" type="checkbox"/> Digital <input type="checkbox"/> Analog
	<input checked="" type="checkbox"/> Thermocouple <input type="checkbox"/> Thermistor

Type of ICP

Date and initials of person examining
contents 4-3-18 JF

Initials of Temperature Reader and Date Read

Temperature Block Present	<input checked="" type="checkbox"/>
Date of Custody Present	<input checked="" type="checkbox"/>
Date of Custody Received	<input checked="" type="checkbox"/>
Date of Custody Received by Lab	<input checked="" type="checkbox"/>
Sample Name & S. P. Received	<input checked="" type="checkbox"/>
Sample Aliquots Present	<input checked="" type="checkbox"/>
Sample Volume	<input checked="" type="checkbox"/>
Certified Certificate Issued	<input checked="" type="checkbox"/>
Serial No. Reference Material	<input checked="" type="checkbox"/>
Reference Materials	<input checked="" type="checkbox"/>
Artifacts associated with sample	<input checked="" type="checkbox"/>
Condition of sample containers	<input checked="" type="checkbox"/>
Condition of sample submission container	<input checked="" type="checkbox"/>
Sample packaging material	<input checked="" type="checkbox"/>
Sample preservation conditions and date received with EPA request exemption	<input checked="" type="checkbox"/>
Unstable materials present	<input checked="" type="checkbox"/>
Other remarks	<input checked="" type="checkbox"/>
PCP Present	<input checked="" type="checkbox"/>

Client Notifications Resolution

Person Contacted

Comments Received



Sample Condition Upon Receipt

Facility Address: 1000 E. 10th Street
Knoxville, TN 37902

Project #: **20**

Courier: Pace Courier Third Courier FedEx UPS DHL USPS Customer Other

Custody Seal on Cooler/Box Present [see COC]

Custody Seals intact: Yes No

Thermometer Used:
 Therm Fisher IR 5
 Therm Fisher IR 6
 Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice [see COC]

Cooler Temperature [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: **LJHb**

Temp must be measured from Temperature blank when present

Comments

Temperature Blank Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1
Chain of Custody Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2
Chain of Custody Complete	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3
Chain of Custody Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4
Sampler Name & Signature on COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5
Samples Arrived within Hold Time	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6
Sufficient Volume	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7
Correct Containers Used	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8
Filtered vol. Rec. for Diss. tests	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9
Sample Labels match COC	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10
All containers received within manufacturer's precautionary and/or expiration dates	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform & O&G)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12
All containers preservation checked found to be in compliance with EPA recommendation	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	If No was preservative added? Yes: No If added record lot no HNO3 H2SO4
Headspace in VOA Vials (>6mm)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14
Trip Blank Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15

Client Notification/ Resolution

Person Contacted _____

Date/Time _____

Comments/ Resolution _____